AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1-2. (Canceled)

3. (Currently Amended) A data transmitting element (DTE) to be used for sending data,

over a link through a first communications network, towards a data receiving element (DRE) for

communication of said data over a second communications network, said DTE comprising:

data sending means (DSM), adapted to send said data towards said DRE;

service level requesting means for generating an Internet Protocol Control Protocol

(IPCP) message, for sending to said DRE, requesting a service level for communicating said data

of said DTE over said second communications network; and

service level proposal receiving means:

adapted to receive from said DRE an IPCP message indicating a proposed service

level that said DRE can provide for communicating said data of said DTE over said

second communications network, and

notifying said DSM of said <u>received</u> service level proposal,

2

wherein said DRE receives said data of the DTE over said first communications

network and transmits said received data of the DTE in said second communications

network.

4. (Previously Presented) The DTE according to claim 3, further comprising service

level proposal renegotiating means, coupled between an output terminal of said service level

proposal receiving means and an input terminal of said service level requesting means, for

generating another IPCP message requesting a service level, different from the proposed service

level indicated in said IPCP message from said DRE, in response to an indication that said

proposed service level is not a satisfying service level.

5. (Currently Amended) A data receiving element (DRE), to be used for receiving data

from a data transmitting element (DTE), over a link through a first communications network, and

communicating said data over a second communications network, said DRE comprising:

data receiving means (DRM), adapted to receive said data from said DTE;

service level request reception means for receiving an Internet Protocol Control Protocol

(IPCP) message, from said DTE in said first communications network, said message indicatesing

a requested service level for said communicating of said data of said DTE over said second

communications network;

3

service level negotiating and proposing means, coupled with said service level request

reception means, for determining a service level that said DRE can provide for communicating

said data of said DTE within said second communications network, based on at least one

predetermined criterion and on said requested service level, and formulating, as a service level

proposal, an IPCP message indicating said determined service level; and

service level proposal sending means, coupled with said service level negotiating and

proposing means, for sending said IPCP message as said service level proposal.

6. (Currently Amended) A data receiving element (DRE), to be used for receiving data

from a data transmitting element (DTE), over a link through a first communications network, and

communicating said data over a second communications network, said DRE comprising:

data receiving means (DRM), adapted to receive said data from said DTE in said first

communications network;

service level negotiating and proposing means, for determining a service level that said

DRE can provide for communicating said data of said DTE within said second communications

network, based on at least one predetermined criterion and on said requested service level, and

formulating, as a service level proposal, an IPCP message indicating said determined service

level; and

service level proposal sending means, coupled with said service level negotiating and

proposing means, for sending said IPCP message as said service level proposal.

4

7. (Currently Amended) A software module for running on a processing system for

inclusion in a data transmitting element (DTE), for sending data, over a link through a first

communications network, towards a data receiving element (DRE) for communication of said

data over a second communications network, said software module comprising:

a data sending sub-module, adapted to send said data towards said DRE;

a service level requesting sub-module, for generating an Internet Protocol Control

Protocol (IPCP) message, for sending to said DRE, requesting a service level for communicating

said data of said DTE over said second communications network; and

a service level proposal receiving sub-module:

adapted to receive from said DRE an IPCP message indicating a proposed service level

that said DRE can provide for communicating said data of said DTE over said second

communications network, and

notifying said data sending sub-module of said received service level proposal,

wherein said DRE receives said data of the DTE over said first communications network

and transmits said received data of the DTE in said second communications networks.

8. (Currently Amended) A software module for running on a processing system for

inclusion in a data transmitting element (DTE), for sending data, over a link through a first

5

communications network, towards a data receiving element (DRE) for communication of said

data over a second communications network, said software module comprising:

a data sending sub-module, adapted to send said data towards said DRE;

a service level requesting sub-module, for generating an Internet Protocol Control

Protocol (IPCP) message, for sending to said DRE, requesting a service level for communicating

said data of said DTE over said second communications network; and

a service level proposal receiving sub-module:

adapted to receive from said DRE an IPCP message indicating a proposed service

level that said DRE can provide for communicating said data of said DTE over said

second communications network, and

notifying said data sending sub-module of said service level proposal;

~~The software module according to claim 7, further comprising~~ a service level proposal

renegotiating sub-module for checking whether the received service level proposal is satisfactory

and for instructing said service level requesting sub-module to generate another service level

request in an IPCP message with a different proposed service level, when the received service

level proposal is found unsatisfactory.

9.   (Currently Amended) A software module for running on a processing system for

inclusion in a data receiving element (DRE), for receiving data from a data transmitting element

(DTE), over a link through a first communications network, and communicating said data over a

second communications network, said software module comprising:

a data receiving sub-module, adapted to receive said data from said DTE;

a service level request reception sub-module, for receiving an Internet Protocol Control

Protocol (IPCP) message, from said DTE in said first communications network, said message

indicates~~ing~~ a requested service level for said communicating of said data of said DTE over said

second communications network;

a service level negotiating and proposing sub-module, co-operating with said service

level request reception sub-module, for determining a service level that said DRE can provide for

communicating said data of said DTE within said second communications network, based on at

least one predetermined criterion and on said requested service level, and formulating, as a

service level proposal, an IPCP message indicating said determined service level; and

a service level proposal sending sub-module, co-operating with said service level

negotiating and proposing sub-module, for sending said IPCP message as said service level

proposal.

10. (Currently Amended) A software module for running on a processing system for

inclusion in a data receiving element (DRE), for receiving data from a data transmitting element

(DTE), over a link through a first communications network, and communicating said data over a

second communications network, said software module comprising:

a data receiving sub-module, adapted to receive said data from said DTE in said first

communications network;

a service level negotiating and proposing sub-module, for determining a service level that

said DRE can provide for communicating said data of said DTE within said second

communications network, based on at least one predetermined criterion and on said requested

service level, and formulating, as a service level proposal, an IPCP message indicating said

determined service level; and

a service level proposal sending sub-module, co-operating with said service level

negotiating and proposing sub-module, for sending said IPCP message as said service level

proposal.

11. (Previously Presented) A method for data communication, comprising:

setting a level of service for a data transmitting network element (DTE), said DTE being

connected to a data receiving network element (DRE) via a point-to-point connection of a first

communications network, said DRE being connected to a second communications network, said

level of service relating to transporting data between said DTE and said second communications

network via said DRE, wherein said level of service is set by:

determining, at said DRE, a service level that said DRE can provide for communicating

said data of said DTE with said second communications network, based on at least one

predetermined criterion;

formulating, at said DRE, an Internet Protocol Control Protocol proposal indicating said

determined service level;

sending said Internet Protocol Control Protocol proposal to said DTE; and

receiving said Internet Protocol Control Protocol proposal at said DTE; and then

transporting said data between said DTE and said second communications network via

said DRE according to said level of service indicated in said Internet Protocol Control Protocol

proposal.

12. (Previously Presented) The method for data communication as set forth in claim 11,

further comprising:

before said determining of said service level at said DRE:

sending, from said DTE to said DRE, an Internet Protocol Control Protocol request

indicating a requested level of service; and

receiving at said DRE said Internet Protocol Control Protocol service level request sent

from said DTE;

wherein said determining of said service level at said DRE is based also on said requested

level of service of said DTE.

13. (New) The DTE according to claim 1, wherein said DTE is a user terminal and said

DRE is an edge element of said second network.

14. (New) The DTE according to claim 13, wherein said DRE is an access server

provider and said second network is an internet network.

15. (New) The DTE according to claim 1, said DTE further comprises a service level

proposal renegotiating means for checking whether the service level proposal received from the

DRE is satisfactory and when the service level is unsatisfactory, the service level requesting

means generates a new IPCP message for sending to the DRE.

16. (New) The DTE according to claim 1, further comprising generating means for

generating data for transmission wherein the DTE is an element creating said data for

transmission.